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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,299	08/06/2003	Ernest B. Rennels	GP-303478 2760/105	8024

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EXAMINER	
MARC, MCDIEUNEL	
ART UNIT	**PAPER NUMBER**
3661	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/635,299	RENNELS, ERNEST B.	
	Examiner	Art Unit	
	McDieunel Marc	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *all* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 4 recites the limitation "size of the traffic region" in claim 4, line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-6 and 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Impson et al.** (U.S. Pat. No. **6,804,602 B2**) in view of **Tu** (U.S. PG Pub. No. **20040260465 A1**).

As per claims 1 and 17, Impson *et al.* teaches a system and an associated method having an incident-aware vehicular sensors for intelligent transportation including a system and an associated method for providing real-time traffic updates to a mobile vehicle communication device (see abstract) comprising:

producing traffic incident region coordinate data [see 603 in col. 8, line 63; the traffic incident data is collected and GPS 110 provides coordinates of the location of any traffic incident; later the GPS coordinate data is tagged (628 of figure 6B) to the traffic incident data and stored in storage 202 of figure 2; col. 8, lines 62 to col. 9, lines 1-25];

communicating the traffic incident region coordinate data to a mobile vehicle communication device 208 (col. 5, line 62 to col. 6, lines 1-5; the probes 200 collect traffic incident data and GPS 110 collects coordinate data; both data are tagged and communicated to storage 208 of figure 2; col. 8, lines 62 to col. 9, lines 1-25);

determining when a traffic incident region coordinate, and based on the communicated traffic incident region coordinate data (see 603 in col. 8, line 63 as noted above), with the exception of within a predetermined radius around the mobile vehicle communication device.

However, Tu teaches navigation system for searching POI and arranging listing order of POI including a traffic region the limitation of within a predetermined radius around the mobile vehicle communication device (see fig. 9B and section [0079], wherein the navigation system is the communication device).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the intelligent transportation of Impson et al. with the navigation system of Tu, because this modification would have enhanced Impson et al. transmportation so that a navigation system performs travel guidance for enabling a user to easily and quickly reach the selected destination, thereby improving the traffic and the efficiency of the satellite radio real time traffic updates.

With respect to claim 11, Impson *et al.* teaches a computer readable medium storing a computer program (see col. 5, lines 25-26, wherein external communication medium being considered as (computer readable medium)[1] or optical disk) comprising:

computer readable code (see figs. 6 A and 6B; col. 8, lines 63 – to – col. 9, line -25) for producing traffic (603 in col. 8, line 63) incident region coordinate data (in the prior art figs. 6A and 6B are flow charts of a computer code, wherein the computer code was written to collect traffic incident data using GPS at any given location 628 of figure 6B, the data is stored in storage 202 of figure 2. The traffic data is later sent to the information service provider 608 of figure 6B; see col. 1, lines 7-24 and col. 5, lines 25-26); computer readable code for directing communication of the traffic incident region coordinate data to a mobile vehicle communication device (col. 5, line 62 to col. 6, lines 1-5; the probes 200 collect traffic incident data and GPS 110 collects coordinate data; both data are tagged and communicated to storage 208 of figure 2; col. 8, lines 62 to col. 9, lines 1-25 as noted above); and

computer readable code (see figs. 6 A and 6B; col. 8, lines 63 – to – col. 9, line -25) for determining when a traffic incident region coordinate; and based on the communicated traffic incident region coordinate data (see 603 in col. 8, line 63 as noted above). Impson *et al.* does not specifically teach the limitation of within a predetermined radius around the mobile vehicle communication device.

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[1] **Machine-Readable Medium** = A medium capable of storing data in a form that can be accessed by an automated sensing device. *Note:* Examples of machine-readable media include (a) magnetic disks, cards, tapes, and drums, (b) punched cards and paper tapes, (c) optical disks, and (d) magnetic ink characters.

However, Tu teaches navigation system for searching POI and arranging listing order of POI including a traffic region the limitation of within a predetermined radius around the mobile vehicle communication device (see fig. 9B and section [0079], whrein the navigation system is the communication device).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the intelligent transportation of Impson et al. with the navigation system of Tu, because this modification would have enhanced Impson et al. transportation so that a navigation system performs travel guidance for enabling a user to easily and quickly reach the selected destination, thereby improving the traffic and the efficiency of the satellite radio real time traffic updates.

As per claims 2, 6 and 18, Impson et al. teaches a system and an associated method, wherein producing traffic incident region coordinates (see col. 603 in col. 8, line 63 as noted above) comprises: receiving traffic incident data (see col. 1, line 12-14, wherein collecting being considered as receiving); processing the traffic incident data (see col. 1, line 14) to group traffic incidents into a plurality of traffic incident regions (see col. 2, lines 25-35); and determining a traffic incident region GPS coordinate for each of the plurality of traffic incident regions; wherein communicating the traffic incident region coordinate comprises: transmitting a traffic incident region GPS coordinate for each of the plurality of traffic incident regions; and receiving the traffic incident region GPS coordinate for each of the plurality of traffic incident regions at the mobile vehicle communication device (see col. 1, lines 15-34); a traffic incident region containing at least one traffic incident (see col. 603 in col. 8, line 63 as noted above). With the exception of the limitation taught below by Tu.

Tu, teaches a navigation system wherein the traffic incident region GPS coordinate describes the geometric center; a selectable geometry (see section [0078], wherein S1 and S2 being considered as geometric centers).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the intelligent transportation of Impson et al. with the navigation system of Tu, because this modification would have enhanced Impson et al. transportation introduce geometric center, thereby improving the traffic and the efficiency of the satellite radio real time traffic updates.

As per claims 3-5, 8-10, 12-16, 19 and 20, TU teaches in combination with Impson et al. a method wherein the traffic incident region GPS coordinate describes the geometric center of traffic incident region containing at least one traffic incident (see figs. 9A-13); wherein the size of the traffic incident region is controlled with a method selected from the group consisting of individually controllable, dynamically controllable, controlling depending on road density and setting the size to 10 miles or less (see fig. 9A); wherein computer readable code for producing the traffic incident region coordinate comprises: computer readable code for processing received traffic incident data to group traffic incidents into a plurality of traffic incident regions; and computer readable code for determining a traffic incident region GPS coordinate for each of the plurality of traffic incident regions (see fig. 3, element 31); wherein the computer readable code for determining a traffic incident region comprises code for determining a geometric center of a traffic incident region containing at least one traffic incident (see figs. 9A-13 as noted above); wherein determining when a traffic incident region is within a predetermined radius around the mobile vehicle communication device comprises: determining a location GPS coordinate describing the location of the mobile vehicle communication device; comparing the received traffic incident region GPS coordinate with the location GPS coordinate describing the location of the mobile vehicle communication device; and identifying when a traffic incident region GPS coordinate is within the predetermined radius around the mobile vehicle communication device based on the comparison (see figs. 9A-13 as noted above). determining localized traffic incident data for the traffic incident region coordinate responsive to determining that the

traffic incident region coordinate is within a forward view radius of the mobile vehicle communication device (see figs. 9A-13 as noted above and fig. 3).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Impson et al.** in view **Tu** as applied to claims 1, 2 and 6 above, and further in view of **Zimmes et al.** (U.S. Pat. No. **20050013417 A1**).

As per claim 7, Impson et al. and Tu teach essential features of the invention substantially as claimed with the exception of a traffic incident region GPS coordinate is transmitted via a satellite radio broadcast).

Zimmes et al. teaches the limitation of a traffic incident region GPS coordinate is transmitted via a satellite radio broadcast (see section [0043]).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the intelligent transportation of Impson et al. Tu' s navigation system with the GPS type of Zimmes et al., because this modification would have enhanced Impson' s et al. and Tu' s teaching in order to introduce, thereby improving the traffic and the efficiency of the satellite radio real time traffic updates.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieunel Marc whose telephone number is (571) 272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

McDieunel Marc

Monday, October 17, 2005

MM/